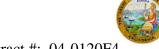
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014977 Address: 333 Burma Road **Date Inspected:** 13-Jun-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** N/A **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes **Delayed / Cancelled:** No N/A

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD** 

Segment 8CW ~ 9AW (Longitudinal Diaphragm) Joint Survey

This QA Inspector performed Joint Inspection with ZPMC Survey Team and ABF Survey Team for the Longitudinal Diaphragm between Segment 8CW ~ 9AW (Shop Segment Splice) between Panel Point (PP) 71 and PP 72 North(Cross Beam side) and South (Bike Path side) for Offset and Sweep. The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area and Sweep was measured at 100 mm from both side from the Floor Beam and 800mm from both side of floor Beam and at Centre (Total 5 Locations). The measured readings were recorded on spread sheet, generated the report and submitted to the Task Leader and Engineer for review.

Segment # 7AW

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector along with Caltrans QA Mr.Manjunath Math performed Individual Inspection for the Flatness measurement for Side Panel to Corner Assembly Longitudinal Weld from PP 48 to PP 50 Measurement area. Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

Panel Point from PP 50 towards PP 49(CW Side)

4380mm two point of contact measurement deformation 2~ 3mm max.

Panel Point from PP 48 towards PP 47 (CB Side)

4060mm two point of contact measurement deformation 1~ 3mm max.

Panel Point from PP 50 towards PP 49 (CW Side)

4300mm to 4520mm two point of contact measurement deformation 2 ~ 3.5mm max.

Panel Point from PP 48 towards PP 47 (CB Side)

3220mm to 3650mm two point of contact measurement deformation 2 ~ 4mm max.

Panel Point from PP 50 towards PP 49 (CB Side)

4300mm to 4540mm two point of contact measurement deformation 2 ~ 3mm max.

#### Segment # 7BW

This QA Inspector along with Caltrans QA Mr.Manjunath Math performed Individual Inspection for the Flatness measurement for Side Panel to Corner Assembly Longitudinal Weld from PP 49 to PP 50 Measurement area. Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

Panel Point from PP 50 towards PP 49(CW Side)

3010mm two point of contact measurement deformation 1.5~ 3mm max.

Panel Point from PP 51 towards PP 50 (CB Side)

2200mm two point of contact measurement deformation 2.3~ 3mm max.

Panel Point from PP 52 towards PP 51 (CW Side)

300mm to 620mm two point of contact measurement deformation 2 ~ 3.7mm max.

Panel Point from PP 50 towards PP 49 (CB Side)

2900mm to 4300mm two point of contact measurement deformation 2 ~ 4mm max.

# Segment #7CW

This QA Inspector along with Caltrans QA Mr.Manjunath Math performed Individual Inspection for the Flatness measurement for Side Panel to Corner Assembly Longitudinal Weld from PP 49 to PP 50 Measurement area. Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

Panel Point from PP 56 towards PP 55 (CW Side)

4380mm two point of contact measurement deformation 2~4mm max.

Panel Point from PP 55 towards PP 54 (CB Side)

4040mm to 4190mm two point of contact measurement deformation 2.5~ 4mm max.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Panel Point from PP 54 towards PP 53 (CB Side)

2730mm to 3020mm two point of contact measurement deformation 2 ~ 3.7mm max.

Panel Point from PP 55 towards PP 54 (CW Side)

3000mm to 3500mm two point of contact measurement deformation 2.4 ~ 4.6mm max.

Panel Point from PP 54 towards PP 53 (CW Side)

560mm to 1000mm two point of contact measurement deformation 2 ~ 4mm max.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

#### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer